Application No.: 10/781,341

Filing Date: February 18, 2004

AMENDMENTS TO THE CLAIMS

1-8. (Canceled)

9. (Currently Amended) A storage networking device for communicating with a

remote storage networking device, comprising:

a controller configured to manage the receipt of storage networking data and

buffer locational data within an iSCSI protocol data unit from a remote storage

networking device, wherein the storage networking data includes at least one command

for a device attached to a storage network and is transmitted using the iSCSI protocol,

and wherein the buffer locational data is encoded using a Target Transfer Tag of the iSCSI

protocol data unit;

a buffer memory configured to at least temporarily store at least part of the storage

networking data at a location within the buffer memory that is based at least in part on the

locational data such that the storage networking device provides direct access to the

buffer memory;

a data pointer table comprising information for calculating a pointer to a location

within the buffer memory, wherein the locational data encoded in the Target Transfer Tag

comprises an index into the data pointer table; and

The storage networking device of Claim 6, further comprising a connection lookup

table defining a plurality of connections between the storage networking device and one or

more remote storage networking devices, wherein the locational data is further configured

to identify one of the connections in the connection lookup table.

10. (Original) The storage networking device of Claim 9, wherein the locational

data is used to verify that data received by the storage networking device comes from a

recognized connection.

11-15. (Canceled)

-2-

Application No.: 10/781,341

Filing Date: February 18, 2004

16. (Currently Amended) A method of storing data in a directly accessible buffer memory of a storage networking device, the method comprising:

receiving storage networking data and first locational data within an iSCSI protocol data unit and over a network from a remote storage networking device, wherein the storage networking data includes at least one command for at least partially controlling a device attached to a storage network and is transmitted using the iSCSI protocol, and wherein the first locational data is configured to specify at least indirectly a location within a buffer memory of a storage networking device and is encoded using a Target Transfer Tag of the iSCSI protocol data unit;

determining based at least in part on the first locational data, a location within the buffer memory; and

storing within the buffer memory, at the location determined at least in part by the first locational data, the storage networking data;-

wherein said determining a location within the buffer memory comprises referencing a data pointer table comprising information for calculating a pointer to a location within the buffer memory, wherein the locational data encoded in the Target Transfer Tag comprises an index into the data pointer table; and

wherein the first locational data is further configured to identify a connection in a connection lookup table defining a plurality of connections between the storage networking device and one or more remote storage networking devices.

- 17. (Previously Presented) The method of Claim 16, further comprising transmitting second locational data to a remote storage networking device and the storage networking device assigning a location within buffer memory that the storage networking data is stored.
- 18. (Original) The method of Claim 17, wherein determining a location includes generating from the first locational data a pointer into the buffer memory.
- 19. (Original) The method of Claim 18, wherein generating the pointer includes extracting the pointer from the first locational data.
- 20. (Original) The method of Claim 18, wherein generating the pointer includes extracting from a part of the first locational data an index into a data pointer table and using the index to extract the pointer from the data pointer table.

Application No.: 10/781,341

Filing Date: February 18, 2004

21. (Original) The method of Claim 20, wherein the part of the first locational data comprising an index is encrypted within the first locational data.

22-23. (Canceled)

24. (Currently Amended) A method of transmitting storage networking data from a remote storage networking device to a storage networking device, comprising:

transmitting, within an iSCSI protocol data unit that indicates that a storage networking device is ready to receive data, a first locational data encoded within a Target Transfer Tag of the iSCSI protocol data unit, from the storage networking device to a remote storage networking device;

receiving at the storage networking device a second locational data and a storage networking data from a remote storage networking device, wherein the second locational data is generated by the remote storage networking device based at least in part on the first locational data, and wherein the storage networking data includes at least one command for at least partially controlling a device attached to a storage network and is transmitted using the iSCSI protocol;

generating, based at least in part on the second locational data, a location in a buffer memory of the storage networking device, wherein the buffer memory is configured to at least temporarily store at least part of the storage networking data at a location within the buffer memory that is based at least in part on the locational data and determined using a data pointer table comprising information for calculating a pointer to a location within the buffer memory, wherein the locational data encoded in the Target Transfer Tag comprises an index into the data pointer table, such that the storage networking device provides direct access to the buffer memory; and

storing the storage networking data at the generated location in the buffer memory; and-

wherein the first locational data is further configured to identify a connection in a connection lookup table defining a plurality of connections between the storage networking device and one or more remote storage networking devices.